

Proposal to Provide Professional Engineering Services

Wastewater Treatment Plant Site Improvements

Prepared for



May 11, 2023

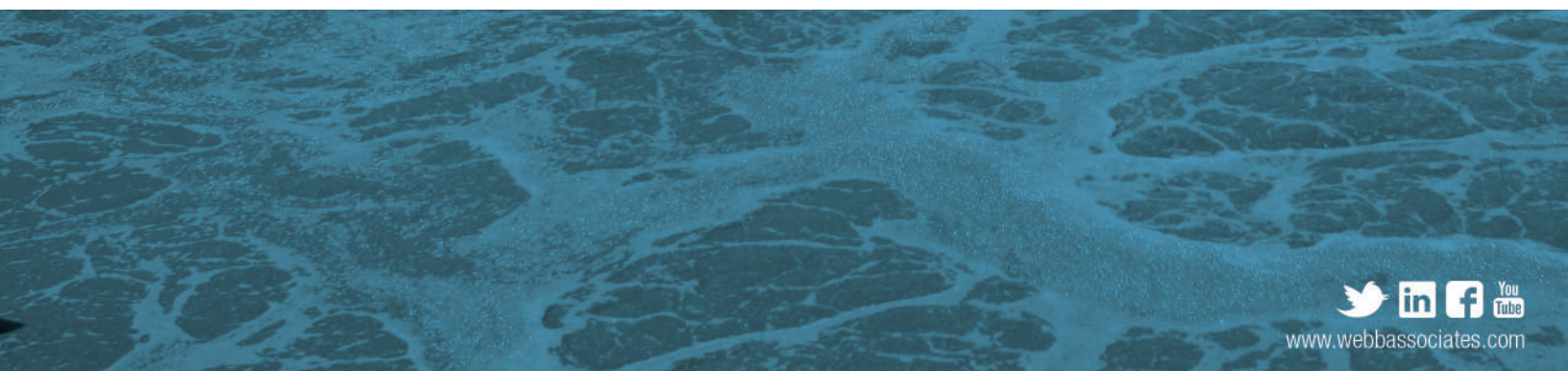


Table of Contents

Section A. Cover Letter	01
Section B. Introduction/Information	02
Section C. Approach	05
Section D. Firm Profile.....	07
Section E. Location	07
Section F. Organization, Key Personnel, and Resumes	08
Section G. Project Experiences.....	19
Section H. References.....	26
Section I. Scope of Services	27
Section J. Cost Proposal.....	31
Section K. Additional Information.....	31
Section L. Insurances.....	31

Section A. Cover Letter



May 11, 2023

City of Beaumont
c/o Grace Wichert
550 E. 6th Street
Beaumont, CA 92223

Corporate Headquarters
3788 McCray Street
Riverside, CA 92506
T: 951.686.1070

RE: Request for Proposals for Engineering Services - Wastewater Treatment Plant Site Improvements

Dear Ms. Wichert:

Enclosed is Albert A. Webb Associates' (WEBB) proposal to provide engineering services for the Wastewater Treatment Plant Site Improvements for the City of Beaumont (City). The City needs a trusted and experienced technical team to manage and lead this project.

The WEBB Team designed the WWTP Upgrade project and therefore has a complete understanding of all aspects of the Plant. The Plant underwent a recent upgrade and expansion to increase its capacity to 6 MGD. However, this expansion resulted in the removal of several facilities and the creation of more exposed dirt areas, requiring the protection of graded slopes from erosion and runoff into the stormwater system.

In addition, the City aims to enhance the functionality, safety, and aesthetics of the plant entrance by reconfiguring the on-site gate and upgrading the landscaping to include an entry monument. The final component of this project involves the construction of a permanent receiving station for vector truck discharges. Currently, the plant receives vector discharge at a temporary facility. Each of these projects will be discussed in detail to ensure the City's objectives are met efficiently and effectively.

Several of our team members also worked on the WWTP Upgrade project and therefore require no ramp up time. Our team members will remain committed for the duration of the project. As a result, you can be confident your water system improvements will be successfully completed in a timely and professional manner. We look forward to the opportunity to continue working together. If you have any questions regarding our proposal, please contact me directly at 951.830.3389, or by email at brian.knoll@webbassociates.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Knoll".

Brian Knoll, PE
Chief Operations Officer
Albert A. Webb Associates
3788 McCray Street
Riverside, CA 92506
951.830.3389 / FAX 951.788.1256
brian.knoll@webbassociates.com

**THANKS FOR
CONSIDERING
WEBB TO BE
YOUR PARTNER.**

Section B. Introduction/Information

Legal Name: Albert A. Webb Associates
Legal Form of Company: Corporation

Representative: Brian Knoll, PE
Chief Operations Officer
3788 McCray Street
Riverside, CA 92506
951.830.3389



(Left) Photo 1 and (Right) Photo 2 showing large areas of the Plant that are now vacant following the completion of the Upgrade Project.

Statement of Understanding for Services Proposed

The City of Beaumont’s Wastewater Treatment Plant has recently been upgraded and expanded to a capacity of 6 MGD. As part of the Upgrade Project, several facilities were removed and replaced with more advanced systems that required significantly less space and has resulted in more exposed dirt areas. There are also graded slopes that need to be protected from erosion and runoff going into the stormwater system. The City would also like to improve the functionality, safety and aesthetics of the Plant entrance by reconfiguring the gate on-site as well as upgrading the landscaping to include an entry monument. The final component of this project is to construct a permanent receiving station for vector truck discharges. The Plant currently receives vector discharge at a temporary facility. Each of these projects will be discussed individually below.

Dust/Erosion Mitigation and Sludge Truck Access Project

As seen in Photos 1 and 2, there are large areas of the Plant that are now vacant following the completion of the Upgrade Project. These areas were previously where the aeration basins were located. The City desires to provide a gravel ground cover to minimize dust and weeds. These improvements will reduce maintenance and enhance equipment longevity by keeping equipment cleaner. There are also graded slopes that need to be protected from erosion (see Photo 3). Slope protection is particularly important in the area around the Influent Pump Station. The mitigation measures may include landscaping, slope stabilization mats, and crib walls. There is also a need to protect the UV Disinfection system from stormwater runoff entering the channels. A curb will be constructed around the channels to prevent runoff intrusion.



Photo 3 - Graded slopes need protection from erosion



Photo 4 - Area between the Sludge Building and EQ Basin will be paved to create 10-15 new parking spaces for the operations team to utilize.

The final components of this phase of the project will be to enhance the driveway circulation and parking at the Plant. The current circulation through the Plant for the sludge hauling trucks is to travel into the Plant and traverse through/around several other facilities to get to the Sludge Loading Station or to drive across the open dirt area and turn around. The City would like to improve truck circulation and eliminate the need to drive through other areas of the Plant so a new paved access road will be constructed near the Sludge Loading Station. Also, the area between the Sludge Building and EQ Basin will be paved to create 10-15 new parking spaces for the operations team to utilize (See Photo 4). The parking area will include a stairway for easy access to the Membrane Treatment Building where their offices are located.

Entrance Gate, Landscaping and Entry Monument

The entry gate to the Plant has always been located just off Fourth Street and is equipped with a manual chain-link gate. The configuration and functionality of this entrance is challenging and potentially unsafe for the operations team, vendors and visitors because there is inadequate space to fully pull off Fourth Street when the gate is not open. The visual aesthetics could also be improved with new landscaping, lighting, and an entry monument. This phase of the project will reconfigure the gate and fence so that trucks and passenger vehicles can exit Fourth Street with the gate closed. The gates will be equipped with security keypads to facilitate access for the operators and increase security of the Plant. Our team will work with the City to develop a concept for the fence, gate, landscape, lighting, and monument. Once the concepts are confirmed by the City, the final plans, specifications and bidding documents will be prepared. An example of a similar facility is shown in Photo 5.



Photo 5 - Concept for the fence, gate, landscape, lighting, and monument.

Vector Dump Station

The City's operations team periodically needs to pump out lift station wet wells, sewer pipelines, storm drain catch basins and other facilities. Vector trucks are utilized for this work and those trucks are then brought to the City's Plant for disposal. By nature of this work, the vector loads are filled with various solids and debris that can be harmful to the Plant equipment. The act of dumping the vector trucks is also messy and challenging. Therefore, a new permanent Vector Dump Station is needed to better facilitate this process. ***The City has selected a design concept based upon WEBB's design and constructed for Lake Arrowhead CSD at their Willow Creek WWTP.*** This concept includes utilizing a roll-off dumpster with an integrated screen to remove solids from the liquid prior to discharging the liquid into the influent sewer. See Photos 6 and 7. This facility is anticipated to be located in the southeast corner of the Plant adjacent to the existing 30-inch influent sewer pipeline. The facility will be designed in a manner to allow access for the vector trucks as well as the waste management haulers who will deliver and pick up the roll-off bins.



Photo 6 - Willow Creek Vector Station, Lake Arrowhead Community Services District - Showing a roll-off dumpster with an integrated screen to remove solids from the liquid prior to discharging the liquid into the influent sewer.

Project Bidding/Phasing Strategy

These projects are somewhat unique and specialized and can be bid as separate contracts. However, we would like to explore the opportunity with the City to make them into one construction project. There are synergies between the three that would provide the City economies of scale and simplify the coordination and contracting efforts. Ultimately, we believe the City will get a better and more cohesive project if they are combined. For purposes of our scope of work and budget, we have assumed that they will all be included in one bid package and will be administered as one project.



Photo 7 - WEBB designed Lake Arrowhead Community Services District's Vector Truck Dump station for the Willow Creek Wastewater Treatment Plant

Section C. Approach

Scope of Services Objectives and Methodology

WEBB understands the absolute need for strong project management. We recognize the critical issues associated with schedule, budget management, and communication. Communication and coordination between the engineering consultant and the City is paramount to each project. To guarantee continuous and effective communication, a project manager will be assigned to each project to serve as the primary point-of-contact to the City and a principal-in-charge will be monitoring the entire process. Our project manager makes it a priority to attend all meetings between the City and the project proponents during the project. This will ensure a constant and effective way of communication resulting in strong budget and schedule control.

Responsiveness and Proximity

Our project management and delivery approach has two major elements: (1) use an experienced project management team with detailed experience of the project area, clear understanding of the City's facilities and preferences, and clearly defined responsibilities and proven management tools to deliver this complex project that meets the City's needs on budget and on schedule, and (2) have a detailed delivery plan that is understood and accepted by the City and the consultant team, with deliverables completed on schedule for timely decision making.

Management Responsibilities and Procedures

Brian Knoll, PE, will be the direct point-of-contact with the City's project manager for all contractual matters focusing on resolving any critical contract issues as soon as they are identified. Brian has the authority to commit firm resources and will support the project manager in managing the overall scope, schedule, and budget. Brian's experience on large multi-disciplinary projects has trained them to look forward to identify and prevent potential delay-causing issues.

The project manager will be responsible for the day-to-day project and technical management which includes:

- Facilitating frequent and consistent communications with the City
- Implementing the overall delivery plan
- Managing the overall scope, schedule, and budget
- Implementing the QA/QC Program
- Overseeing the project controls staff for timely project management reports

Shane Bloomfield, PE, will be responsible for facilitating final decisions by the City, coordination, management, communicating to the project team and the City project manager, preparing and reviewing design deliverables, and directing design support service disciplines and specialty subcontractors. Shane will assist in presenting the technical work at meetings and documenting action items and decisions.

The Team QA/QC and Project Management Plan will facilitate successful project execution. Management tools, procedures, and a delivery plan are all contained in a comprehensive Project Methodology Plan that is prepared at the beginning of the project and is updated throughout the project. Having a comprehensive and detailed Project Management Plan is essential for delivering a major design project with an integrated team consisting of the City, multiple stakeholders, multiple disciplines, and many deliverables. The City input into the plan will be essential to make certain it is an effective tool, adequately used, and meets your needs. An outline of the Project Management Plan and some initial comments and items to be included, in addition to our detailed Communication Plan, are as follows:

Schedule Management

A preliminary schedule will be prepared, provided, and discussed. In collaboration with the City, the project schedule and milestones will be evaluated and then modifications will be made to set the final baseline schedule during the initial project kick-off process. The baseline schedule will be monitored and tracked by our project manager to maintain the

project milestones and manage critical path items. A tracking schedule will be provided with monthly updates and all schedule variances identified. Actions required to correct schedule deviations will be developed and implemented by the team. The project schedule is an effective management tool when developed and maintained to guide the design team through the tasks required to successfully complete a project. WEBB uses Microsoft Project software to schedule and track project tasks.

Cost/Budget Management Plan

The proposed project budget will be prepared based on tasks required to successfully complete the project. Our project manager will track the final budget compared to the actual earned value, task completion, and cost-to-date and will identify any project cost variance monthly. Corrective actions will be taken to maintain the project budget. If changes to the scope and budget are deemed necessary, our project manager will work with the City to justify the need and clearly define the impacts.

Communication Plan and Management

Communication between all team members and the City is critical to its success. A key differentiator between our project team and our competitors is our physical location and our ability to meet with the clients and stakeholders quickly. We are committed to providing consistent communication by having required members of the project team available for all City meetings.

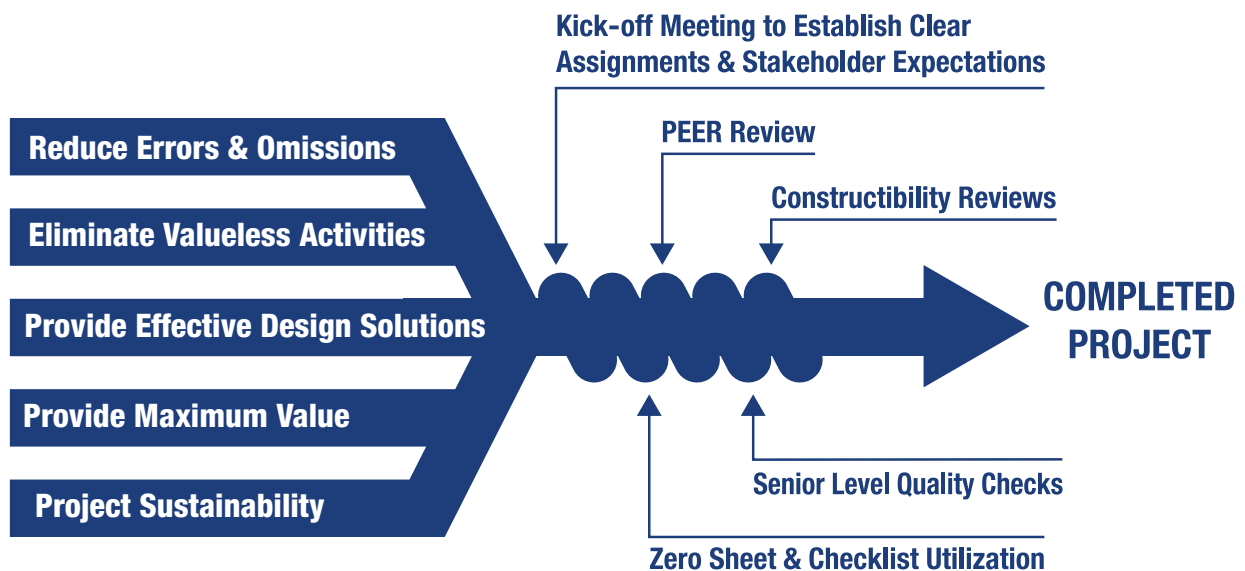
Issue Management/Risk Management

The tracking of project issues and management of risks is facilitated through a tracking log and available to the City and the project team. With issues being raised through email, phone calls, and meetings throughout the duration of the project, having a centralized document ensures project impacts are identified, logged, assigned, analyzed, acted upon, and addressed as part of the design process.

Quality Management Plan (QMP)

The quality control for this project will be embedded in every stage of the project development. Our QA/QC Program is designed to enhance the cooperation and synergy between the disciplines in-house, our design teams, sub-consultants, and the City. Our entire staff is part of the QA/QC Program and each plays a significant role in its implementation. As an underlying principle of our QA/QC Program, WEBB will utilize senior level staff to review work the product to utilize the experience and knowledge to each aspect of the project.

QA / QC PROCESS



Section D. Firm Profile

Albert A. Webb Associates (WEBB), a **Corporation**, has consistently provided civil engineering services to public sector clients throughout California since 1945. This means our clients receive the benefit of a financially stable firm that has withstood many diverse economic times. WEBB is a mid-size consulting firm with offices in Riverside and Murrieta to best meet the needs of all of our clients. WEBB has 180 associates and the in-house expertise to address the needs of cities, water and special districts, counties, regional agencies, and our partner firms within the industry. WEBB offers a broad range of services to meet the objectives of our clients which include project development, planning, design, entitlement, funding, permitting, construction management, and inspection.

Service Departments

- Water Resources
- Construction Management and Inspection
- Land Development Planning & Entitlement
- Land Development Engineering
- Traffic and Transportation Engineering
- Environmental Services
- Biological Resources
- Land Survey and Mapping Services
- Landscape Architecture
- Geographic Information Systems

Owner and Principal Parties

- Matthew Webb, PE, TE, LS - President/CEO
 - Scott Webb - Senior Vice President
 - Steve Webb - Director of Risk Management
 - Brian Knoll, PE - Chief Operations Officer
 - Kevin W.M. Ferguson - Chief Development Officer
 - Scott Hildebrandt, PE - Chief Strategy Officer
 - Todd Smith - Chief Financial Officer
 - Sam Gershon, RCE - Senior Vice President
 - Bruce Davis, PE - Senior Vice President
 - Dilesh Sheth, PE, TE - Senior Vice President
 - Stephanie Standerfer - Vice President
 - Jason Ardery, PE, TE, LLS, CPESC, QSD - Vice President
 - Joseph Caldwell, PE, CPESC, CPSWQ - Practice Area Leader
 - Emily Webb, J.D. - Senior Land Use and Entitlement Specialist
-

Firm Specifics

1945

Founding Year

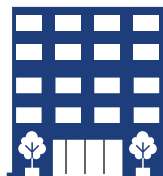
180

Number of Employees

60+

Professional Licenses

Section E. Location

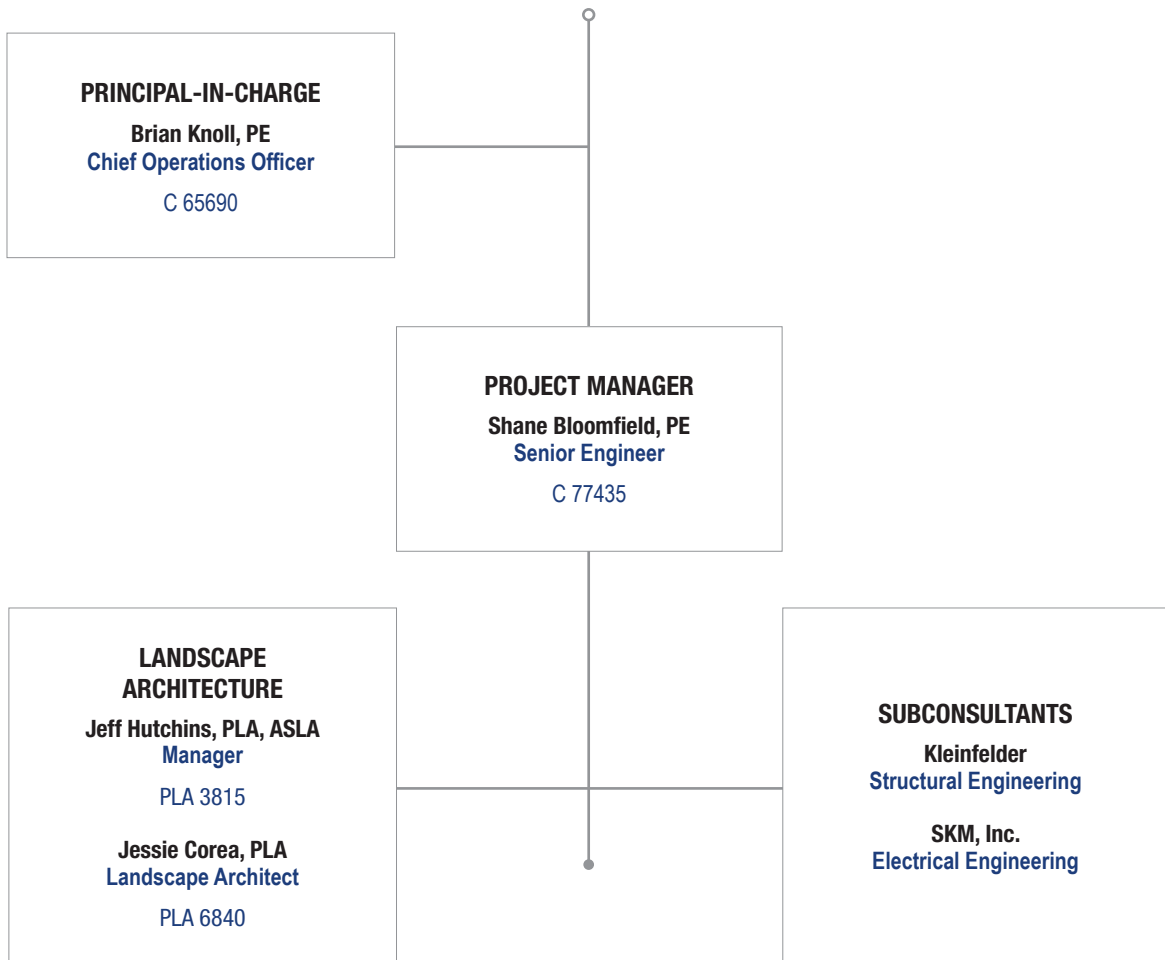


Corporate Headquarters:

3788 McCray Street
Riverside, CA 92506
951.686.1070

Section F. Organization, Key Personnel, and Resumes

Shane Bloomfield PE, will head up the WEBB Team as the Project Manager. Shane’s experience covers a variety of improvements for wastewater treatment facilities. These include headworks design, yard piping, grading and civil improvements, drying beds and vector truck dump stations. **Brian Knoll PE**, will be the Principal-in-Charge of this project based on his extensive experience in wastewater treatment facility design and upgrades, coordinating multi-disciplinary design teams to provide cost competitive design and construction support services. Brian’s most recent experience includes PVRWRF vector truck dump station for the Eastern Municipal Water District, 14 MGD upgrade to WRCRWA’s facility in Eastvale, and the 14 MGD upgrade to the City of Beaumont’s wastewater treatment facility. **SKM, Inc.**, will provide electrical engineering services. WEBB and SKM have teamed on a number of wastewater treatment projects in the last five years, including the City of Beaumont’s WWTP Expansion. Structural engineering will be provided by **Kleinfelder**.





Shane Bloomfield, PE

Senior Engineer

Shane Bloomfield, PE, is a Senior Engineer with WEBB's Water Resources Department. Shane specializes in the design of public works projects consisting of major pumping plants, groundwater pumping wells, sewer collection system design, wet well rehabilitation, water distribution system design, wastewater treatment plant design, and hydraulic system modeling using various computer models. He has engineering design responsibilities for several projects for public works agency clients including the City of Ontario, City of Riverside, Jurupa Community Services District, Eastern Municipal Water District, and Crestline-Lake Arrowhead Water Agency.

REGISTRATIONS

Registered Civil Engineer C 77435 (CA)

EDUCATION

BS, Geology/Hydrology'
Brigham Young University
MS, Environmental Science & Engineering
Colorado School of Mines

AFFILIATIONS

National Groundwater Association (NGWA)

Vector Dump Station - Willow Creek Wastewater Treatment Plant, Lake Arrowhead Community Services District

Shane was the Project Manager for the District's project. WEBB provided engineering design services for the District's of Willow Creek Wastewater Treatment Plant (WCWWTP) Upgrades. The overall plan for this facility was to simplify the existing facility for equalizing flow to the Grass Valley Wastewater Treatment Plant (GVWWTP). The modifications included changing the facility to provide only primary treatment, maximizing the existing storage ponds, lining the ponds, eliminating the discharge pipeline such that all discharge is directed only to the GVWWTP, upgrading the existing headworks structures (meter, grit chamber, primary clarifier) to meet the anticipated peak flow and evaluating one of the existing primary clarifiers.

With regards to the Vector Dump Station, the District demoed the existing facility and WEBB designed the new Vector Dump Station to be a trash enclosure as seen above. The site also features plenty of maneuverability for multiple trucks.

PVRWRF Vector Truck Dump Station Design, Eastern Municipal Water District (District)

Shane serves as the Project Manager for the District's design of a new Vector Truck dump station at the District's PVRWRF. The dump station will meet regulatory requirements and meet the District's goals of 1) efficient operations, and 2) exceeding minimum safety standards at this Cal/STAR site for ergonomics, employee safety, safe walking surfaces, safe chemical handling and appropriate signage and controls for vehicular travel. The project includes preliminary and final design of a complete Vector Truck dump station to include a roadway system for safe and easy ingress and egress, maneuvering space, containment berms and slopes, dumping area to accommodate up to six Vector Trucks simultaneously, a connection to sewer for drainage, accessible wash down water, and an ergonomically friendly cleaning, effective and efficient solids handling area, a storage shed for lime, lighting, and vector control strategies. The design package includes all aspects of a fully functional Vector Truck dump station. When complete, the station will become a model for future Vector Truck dump stations for the District.

WWTP Expansion and Salt Mitigation Project, City of Beaumont (City)

Shane serves as the Civil Designer for the City's WWTP Expansion. The existing WWTP needs to be expanded and upgraded. The WWTP is currently treating over 75% of its permitted capacity and therefore must begin the expansion process. Per the new Regional Water Quality Control Board's updated Basin Plan, the City must begin

Shane Bloomfield, PE

Senior Engineer

reducing TDS being discharged from the plant. The City completed a feasibility study to identify the best way to expand and upgrade the plant.

Beaumont WWTP Expansion/Upgrade Preliminary Design, City of Beaumont Shane served as WWTP Expansion/Upgrade Civil Engineer on the WEBB Team that prepared the project feasibility study, which analyzed two different options. The first was the Beaumont option which expands and upgrades treatment at the City's WWTP. For this option three different WWTP configurations were evaluated. In addition, options were explored to dispose of waste brine from the advanced treatment system. The second option was to consolidate treatment with YVWD and deliver all wastewater flow there. For each option, detailed cost estimates were developed taking into account capital cost and O&M costs. In the end the City Council selected the Beaumont option. The preliminary design includes the preparation of 20%-30% plans for both the WWTP expansion as well as a 23-mile brine disposal pipeline connecting to the IEBL in San Bernardino. The expansion project includes replacing 20 million gallons per day (MGD) of existing capacity with 26 MGD of new capacity. The improvements also include new solids processing facilities.

Temecula WRF Expansion, Eastern Municipal Water District (EMWD) - Shane served as a design engineer for EMWD's 23 MGD Expansion Project at the Temecula WRF. As a consulting partner to CH2MHill, WEBB was responsible for all aspects of the civil design including site layouts, grading, yard piping, and utility relocations for the 5 MGD expansion of the plant. New facilities included headworks expansion, primary clarifiers, membrane bioreactor, site improvements, and associated yard piping.

Calipatria Surface Water Treatment Plant Chemical Feed (6 MGD), Golden State Water Company - For this project, Shane was responsible for the design of two 4.5-MG geo-membrane lined open raw-water reservoirs and four 1-MG welded steel reservoirs. Shane prepared the civil and mechanical drawings associated with the reservoirs, including inlet/outlet piping, concrete ring wall design, and site piping. Shane was responsible for review of the structural drawings for the steel reservoirs during the construction phase of the project.

Imperial Wastewater Treatment Plant Expansion (1.0 MGD), City of Imperial (City) - Shane served as Project Engineer for the Imperial Wastewater Treatment Plant Expansion (1.0 MGD) Project. The purpose of this project was to provide additional wastewater treatment capacity for the City and upgrade the City's disinfection system. WEBB was responsible for the implementation of this 1.0 MGD wastewater treatment plant (WWTP) upgrade project. The firm had responsibility for all aspects of the project including preliminary engineering, environmental documentation and compliance, survey and mapping, final facility design, bidding, construction management, inspection, and NPDES permitting. The upgrades to the City's existing facility included the design of new headworks screening units, addition of an activated sludge extended aeration basin, reinforced concrete secondary clarifiers, blower building and blower units, upgraded UV disinfection system, sludge drying beds and sludge staging area, flow monitoring and sampling, electrical and controls upgrades, and all appurtenant process and yard piping.

Golden State Water Company - Bissell Tank and Treatment Plant, Golden State Water Company - Shane was responsible for the construction management and field inspection. His responsibilities also included submittal review, responding to questions during construction, monitoring schedules, reviewing payment requests, resolving change orders, performing materials testing for soils and concrete, and on-site field inspection during construction. For this project, Shane was responsible for the design of two 4.5-MG geo-membrane lined open raw-water reservoirs and four 1-MG welded steel reservoirs. Shane prepared the civil and mechanical drawings associated with the reservoirs, including inlet/outlet piping, concrete ring wall design, and site piping. Shane was responsible for review of the structural drawings for the steel reservoirs during the construction phase of the project.



Brian Knoll, PE

Chief Operations Officer

Brian Knoll, PE, is a Chief Operations Officer with WEBB. Brian has been responsible for the design and direction of capital improvement projects throughout southern California. Brian's expertise lies in planning, design, and construction oversight of water and wastewater facilities. Brian has been involved in numerous large multi-discipline water and wastewater projects including the City of Riverside's 26 MGD expansion of their water quality control plant, the 14 MGD expansion of the Western Riverside Wastewater Treatment Plant, and the 6 MGD expansion of the Calipatria Water Treatment Plant. He has worked extensively with the City of Imperial, Western Municipal Water District, Golden State Water Company, the City of Corona, Crestline Lake Arrowhead Water Agency, Eastern Municipal Water District, the City of Riverside, and WRCRWA. Brian has also worked closely with other engineering partners such as CDM Smith, Black & Veatch, and CH2M Hill. His macro style in water resources leadership coupled with a practical approach, enhances Brian's standing within the firm and the industry.

REGISTRATIONS

Registered Civil Engineer C 65690 (CA)
Registered Civil Engineer C 42407 (AZ)

EDUCATION

MS, Civil Engineering
Brigham Young University
BS, Civil Engineering
Brigham Young University

AFFILIATIONS

American Water Works Association (AWWA)
American Society of Civil Engineers (ASCE)
Water Environment Federation (WEF)
Inland County Water Association (ICWA)

Wastewater Treatment Plant Expansion and Salt Mitigation Project, City of Beaumont (City) - Brian serves as Principal-in-Charge and Project Manager for the City's project which consists of two major components:

Waste Water Treatment Plant (WWTP) Expansion and Upgrade - Final Design

The existing WWTP needs to be expanded and upgraded. The WWTP is currently treating over 75% of its permitted capacity and therefore must begin the expansion process. Per the new Regional Water Quality Control Board's updated Basin Plan, the City must begin reducing TDS being discharged from the plant. The City completed a feasibility study to identify the best way to expand and upgrade the plant. The Plant will be converted to an MBR process followed by RO for TDS reduction. The Plant will also add screening, EQ, sludge dewatering, and drying.

Brine Line - Final Design - Brine disposal is an integral part of this project and was a key driver in the selection of this project. Without a safe, reliable, and cost effective way to dispose of the brine, this project cannot move forward and compliance with the Basin Plan would be impossible. The brine pipeline connecting to the Inland Empire Brine Line (IEBL) was determined to be the best option during the feasibility study, due to cost and certainty of operation. The brine line has been sized at 12-inches and will be approximately 23-miles long. The pipeline begins at the City's WWTP and ends near the City of San Bernardino's WWTP on Waterman Avenue.

PVRWRF Vector Truck Dump Station Design, Eastern Municipal Water District (District) - Brian serves as the Principal-in-Charge for the District's design of a new Vector Truck dump station at the District's PVRWRF. The dump station will meet regulatory requirements and meet the District's goals of 1) efficient operations, and 2) exceeding minimum safety standards at this Cal/STAR site for ergonomics, employee safety, safe walking surfaces, safe chemical handling and appropriate signage and controls for vehicular travel. The project includes preliminary and final

Brian Knoll, PE

Chief Operations Officer

design of a complete Vector Truck dump station to include a roadway system for safe and easy ingress and egress, maneuvering space, containment berms and slopes, dumping area to accommodate up to six Vector Trucks simultaneously, a connection to sewer for drainage, accessible wash down water, and an ergonomically friendly cleaning, effective and efficient solids handling area, a storage shed for lime, lighting, and vector control strategies. The design package includes all aspects of a fully functional Vector Truck dump station. When complete, the station will become a model for future Vector Truck dump stations for the District.

Imperial Wastewater Treatment Plant Expansion (1.0 MGD), City of Imperial (City) - Brian served as Principal-in-Charge for the Imperial Wastewater Treatment Plant Expansion (1.0 MGD) Project. The purpose of this project was to provide additional wastewater treatment capacity for the City and upgrade the City's disinfection system. WEBB was responsible for the implementation of this 1.0 MGD wastewater treatment plant (WWTP) upgrade project. The firm had responsibility for all aspects of the project including preliminary engineering, environmental documentation and compliance, survey and mapping, final facility design, bidding, construction management, inspection, and NPDES permitting. The upgrades to the City's existing facility included the design of new headworks screening units, addition of an activated sludge extended aeration basin, reinforced concrete secondary clarifiers, blower building and blower units, upgraded UV disinfection system, sludge drying beds and sludge staging area, flow monitoring and sampling, electrical and controls upgrades, and all appurtenant process and yard piping.

WRCWRA Wastewater Treatment Plant, Western Riverside County Regional Wastewater Authority - Brian served as Project Manager for the WEBB Team that designed the 14 MGD plant expansion. The expansion project included evaluating alternatives to provide additional flow and biological capacity while reducing the overall cost of treatment. WEBB's design includes primary, secondary, and tertiary treatment along with disinfection and solids handling. Working with the member agencies, cost effective alternatives are being selected and refined to make this project affordable to build while reducing the cost of treatment. The project also includes chemical storage and pumping.

WRF-1 Centrifuge Replacement Expansion Phase 1, City of Corona Department of Water and Power - Brian served as the Project Manager for this project. The purpose of this project was to improve biosolids dewatering performance at Corona's WRF #1. This is accomplished by replacing one of the existing belt presses with a new centrifuge. The two existing belt presses discharge dewatered solids at approximately 14% DS into the conveyor system and into the truck loading and dryer facilities. It is anticipated that the new centrifuge will produce 16-18% DS which will reduce hauling costs when the sludge is being moved out of the facility and will reduce operating costs when the dryer is in operation.

WRP 10 Headworks Condition Assessment and Alternatives, Coachella Valley Water District (District) - Brian served as Project Manager for the WEBB Team which prepared the Condition Assessment and Recommendation Report for the District's WRP 10 Headworks. The result of report and coordination with District personnel was the recommendation to replace the existing Influent Pump Station, Headworks Screens and associated facilities.

Existing data provided by the District was reviewed to develop the existing flows and loads received at the plant. District input and information was used to project future flows and loads for planning and design purposes at the plant. Operation, maintenance, and replacement costs were developed for the alternatives and included as part of the overall evaluation of the alternatives. WEBB held three workshops associated with the assessment. The final report was delivered after the input and review from all the workshops was incorporated.



Eric Ng, PE, SE

Principal-in-Charge

Kleinfelder

Registered Civil Engineer C 43701

Registered Structural Engineer SE 3583

EDUCATION

MS, Structural Engineering

BS, Structural Engineering

Eric has over 30 years of professional experience in structural engineering and a design background encompassing structures constructed with construction materials such as reinforced concrete, reinforced masonry, structural steel, aluminum, and wood. His project experience involves retrofit or new design of numerous reservoirs (concrete and steel), potable water and wastewater pump stations, dam outlet towers, industrial tilt up and masonry buildings, hospitals, schools, fire stations, water, and wastewater treatment plants, and residential buildings.

Nuevo Tank Condition Assessment and Rehabilitation, Eastern Municipal Water District - Eric provided a visual condition assessment and the rehabilitation design of a new roof for an existing 50 foot diameter by 32 foot tall steel tank. Kleinfelder also provided construction support services.

Fruitvale Tank Condition Assessment, Eastern Municipal Water District, Perris - Eric provided a visual condition assessment and report for the structural condition of this 1 million gallon steel tank.

Reservoirs Seismic Retrofits City of San Bernardino, San Bernardino, CA. Eric provided structural engineering services for the seismic review and analysis of 23 existing reservoirs for the City of San Bernardino Municipal Water Department. The reservoir types include circular steel, circular conventionally reinforced concrete, and rectangular conventionally reinforced concrete, both above and below grade.

Pump Station at 65th and Herrick, City of San Diego Water Department, San Diego - Eric provided Quality Control on the structural design of this new aboveground pump station at 65th Street and Herrick and the design of a concrete masonry shell and a wood-framed roof. The 65th & Herrick Water Pump Station is located at the southeast corner of 65th and Herrick Streets in Encanto and services the communities of Encanto, Skyline and Paradise Hills. The new pump station was built to replace an existing pump station built in 1949. The new pump station includes a new masonry pump house, and feature three new state-of-the-art variable speed pumps, one backup pump, an emergency generator, new electrical control equipment as well as site and landscaping improvements.

Garden Grove Concrete Reservoirs Condition Assessment, City of Garden Grove - Eric served as Project Manager for the assessment of eight concrete reservoirs for the City of Garden Grove. The reservoirs included in the assessment ranged in capacity from 4 MG to 10 MG with an age of 15 to 45 years old. Six of the reservoirs were circular pre stressed concrete tanks and the remaining two were rectangular concrete tanks. The scope of work included site observations of each reservoir and the associated site, structural and seismic analysis, a report summarizing the results of the investigations with improvement and upgrade recommendations, and a capital improvement program to aid in budgeting and scheduling.

San Vicente Pump Station, San Diego Water Authority, San Diego - Eric provided engineering design for the structural design of a 30,000 hp pump station for the San Diego County Water Authority. The building is approximately 260-foot-long by 80-foot-wide by 50-foot-high, and has a clear height of 34 feet from operating floor to bottom of roof girder and is organized on two levels. The lower level pump room houses the pumps. This lower level has a depressed passageway along the north wall to provide access between the pumps. The upper level houses the control room, the unisex toilet, the loading dock, and appropriately sized support areas such as electrical and heating, ventilation, and air conditioning (HVAC).



Christina Nishimoto, PE, SE

Project Manager

Kleinfelder

Registered Civil Engineer C 73208
Registered Structural Engineer SE 6084

EDUCATION

MS, Structural Engineering, University of California, San Diego
BS, Structural Engineering, University of California, San Diego

Christina Nishimoto has nine years of professional experience including working with steel, concrete, masonry, and timber structures and is knowledgeable in the design considerations of all four materials and their respective governing codes. Her design phase work has included attending meetings, coordinating with other professional trades, structural analysis, and detailing.

Wastewater Treatment Plant Expansion and Salt Mitigation Project, City of Beaumont - Christina serves as Structural Project Engineer for the City's project which consists of two major components:

Waste Water Treatment Plant (WWTP) Expansion and Upgrade - Final Design (Structural) - The existing WWTP needs to be expanded and upgraded. The WWTP is currently treating over 75% of its permitted capacity and therefore must begin the expansion process. Per the new Regional Water Quality Control Board's updated Basin Plan, the City must begin reducing TDS being discharged from the plant. The City completed a feasibility study to identify the best way to expand and upgrade the plant. The Plant will be converted to an MBR process followed by RO for TDS reduction. The Plant will also add screening, EQ, sludge dewatering, and drying.

Brine Line - Final Design (Structural) - Brine disposal is an integral part of this project and was a key driver in the selection of this project. Without a safe, reliable, and cost effective way to dispose of the brine, this project cannot move forward and compliance with the Basin Plan would be impossible. The brine pipeline connecting to the Inland Empire Brine Line (IEBL) was determined to be the best option during the feasibility study, due to cost and certainty of operation. The brine line has been sized at 12-inches and will be approximately 23-miles long. The pipeline begins at the City's WWTP and ends near the City of San Bernardino's WWTP on Waterman Avenue.

WRCWRA Wastewater Treatment Plant, Western Riverside County Regional Wastewater Authority - Christina served as Structural Project Engineer for the WEBB Team that designed the 14 MGD plant expansion. The expansion project included evaluating alternatives to provide additional flow and biological capacity while reducing the overall cost of treatment. WEBB's design includes primary, secondary, and tertiary treatment along with disinfection and solids handling. Working with the member agencies, cost effective alternatives are being selected and refined to make this project affordable to build while reducing the cost of treatment. The project also includes chemical storage and pumping.

Plant 150, East Valley Water District - Christina serves as Project Engineer providing foundation calculations, drawings, and specifications for Plant 150, a centralized water treatment plant. The scope of work includes a ring foundation for two 500,000 gallon steel tanks for surface water, concrete foundations for an operations building, chemical building, and multiple ion exchange tanks.

Christina Nishimoto, PE, SE

Project Manager

Kleinfelder

Miramar Clearwell Improvements, City of San Diego Public Utilities Department - Christina serves as Project Engineer providing the design of two new rectangular hopper bottom reservoirs, totaling 58.3 MG. The structural system is a two-way reinforced concrete roof with drop panels supported seismically by perimeter concrete shearwalls. Christina is also designing a 5 MG chlorine contact chamber of similar structural system and assisting in managing the work of a number of subconsultants, including the water disinfection process, architectural, civil, landscaping, and environmental permitting.

Point Loma Sedimentation Basin Rehabilitation, City of San Diego - Christina served as Project Engineer on the Point Loma Wastewater Treatment Plant project that consists of 12 existing sedimentation basins constructed as several different projects starting in 1962 through 1996. The result of the varying projects is non-uniformity within the 12 basins. Christina provided support on structural engineering services provided by KLF|SWE which included site evaluation, design and drafting, and construction administration during the construction process. Additionally, Christina provided the design of a pipe support rack.

Pump Stations 1 and 2, City of San Diego Metropolitan Wastewater Department - Christina provided structural calculations and construction support for this design-build project. KLF/SWE's scope of work included the design of a two-story concrete masonry building at Pump Station 2 as a sub-consultant to Carollo Engineers. The first floor of the building is an electrical room and the second floor is used for storage. The structural system of the building consists of long span trusses for the roof framing, composite floor, and a mat foundation.

Twin Oaks Central Basin, Central Basin Municipal Water District - Christina served as Project Engineer providing design calculations for the 50 MGD design/build water treatment plant. The design included pump stations, arc flow treatment barriers, two 14 MGD reservoirs, and an ozone treatment facility and filter basin.

Pala Casino Wastewater Treatment Plant, Pala Band of Mission Indians - Christina served as Project Engineer providing the design calculations for this project, which provided the Pala Band of Mission Indians a new wastewater treatment plant and upgrades to the existing lift station.

Phase I Expansion, Riverside Regional Water Quality Control Plant - Christina served as the Project Engineer and provided construction support services for the Phase I expansion. KLF/SWE's scope of work included design consulting services for this project. The expansion scope was to replace 20 MGD of existing conventional activated sludge capacity with 26 MGD of membrane bioreactor capacity.



Mark P. Jeppsen, P.E. - Principal

(801) 683-3760 - mark.jeppsen@skmeng.com

Mr. Jeppsen is an electrical, instrumentation and controls engineer with 21 years of experience in power design, controls engineering, process and instrumentation design, industrial network design, construction oversight, radio and telemetry systems, SCADA system design and integration and PLC and HMI design and integration. He has designed and integrated multiple potable water, secondary water, water treatment, wastewater collection and wastewater treatment systems. Design tasks include facility power, motor power and control, SCADA systems, instrumentation selection and control, process and instrumentation diagrams, communications networks and systems, control loop diagrams and descriptions. Integration tasks include control and PLC panel design and construction, PLC, OIT and HMI programming and commissioning, radio system integration and testing, instrument calibration, automated reporting systems and operator training and documentation.

Project Role

Electrical & Controls Engineer

Work Experience

21 Years

Education

BS Electrical Engineering
University of Utah, 2002

Registration

Professional Engineer:
Utah

Certification

Ignition Gold Certification

Specialties

- Electrical Engineering
- Control and SCADA Systems
- Design & Integration
- Network and Communications
- Design and Integration
- Water & Wastewater
- Facilities Process Control and Optimization
- Project Management
- Construction Management

Project Experience

2009 - 2021:

Jurupa Community Services District (JCSD), Jurupa, CA - Electrical and Controls Engineer

Mark has worked with JCSD on various projects over the years including the Regional Lift Station and various other lift stations. He has also been the lead electrical engineer on Wells 13, 27 & 28 as well as the JCSD-RCSD Booster Pump Station. Mark has worked closely with the District's controls engineer and O&M staff to develop designs drawings that are tailored to the District's standards.

2009 - Present:

Western Riverside County Regional Wastewater Authority (WRCRWA), Eastvale, CA - Electrical and Controls Engineer

In 2009 Mark led the electrical and control design for an aeration upgrade at the WRCRWA plant. This included a new blower building with associated controls for the existing oxidation ditches. In 2012 Mark was the lead electrical engineer for a complete plant expansion at WRCRWA which also included new network, PLC, and HMI systems. Since the completion of the expansion, Mark has provided services for several projects and has provided on-call support for the facility.

2006 – Present:

Salt Lake City, UT - Electrical and Controls Engineer

SKM has been providing services to Salt Lake City for their various water and wastewater facilities since 2006. Mark is currently overseeing the implementation of a complete control system upgrade at the 50 MGD Water Reclamation Facility which includes control panel upgrades, PLC replacements and new HMI screens. SKM has designed a new WAS thickening facility and is currently designing a new Headworks facility. Mark is the lead engineer and project manager for electrical and controls upgrades at the 20 MGD Big Cottonwood Water Treatment Plant that will be completed in 2018.

2004 – Present:

Central Weber Sewer Improvement District, UT - Electrical and Controls Engineer

SKM has been working for Central Weber Sewer Improvement District (CWSID) since 2004 by providing electrical designs, controls upgrades and system maintenance. Mark has managed upgrades at the plant as they have come, including upgrades for the influent pump building, utility water pump building and PLC & HMI upgrades. In 2006 design began for a complete 60 MGD plant expansion and SKM was an integral part of the design and integration team. Construction for this project began in 2008 and was completed in 2012.

2004 – Present:

Sandy City, UT - Electrical and Controls Engineer

SKM provided the complete and operational SCADA System for Sandy City's Water System that was completed in 2005. Since then, SKM has provided incremental additions, improvements and maintenance including a new storm water system. The system consists of nearly 40 remote sites that consist of tanks, boosters and wells. In 2016 SKM provided an HMI system upgrade for the water and storm water systems.

2003 – Present:

Park City, UT - Electrical and Controls Engineer

SKM began working for Park City by providing the system integration for an iron, arsenic and manganese removal process at the Spiro Water Treatment Plant in 2003. In 2012, SKM provided the complete and operational SCADA System for the Quinn's Junction Water Treatment Plant, a microfiltration membrane process. This included PLC & HMI programming, custom reports and historical data gathering and startup and commissioning. In 2016 SKM upgraded Park City's complete SCADA system which included their two water treatment plants and approximately 70 remote boosters, tanks, metering stations, PRV stations and well houses.

Mark P. Jeppsen, P.E. - Principal

Project Experience (continued)

2003 – Present:

City of Tooele, UT - Electrical and Controls Engineer

Mark began working for the City of Tooele by providing electrical and controls maintenance at the City's Water Reclamation Facility. In 2011 Mark was the lead electrical engineer for the design, construction and integration of a plant expansion at the Water Reclamation Facility. In 2015 SKM began providing electrical and controls services for the City's culinary water system.

2002 – Present:

City of Payson, UT - Electrical and Controls Engineer

The Payson Wastewater Treatment Plant was upgraded in 2002. Mark successfully implemented the electrical design for the project, oversaw the construction, and integrated the control system. A new fiber optic network was successfully installed and improved the operation and reliability of the SCADA system.

1999 – Present:

Springville City, UT - Electrical and Controls Engineer

Mark successfully designed and implemented the electrical and controls for two plant expansions at the Springville Wastewater Treatment Plant. The first expansion was in 1999 and the second in 2009. The expansions consisted of a new electrical service, new SCADA system and PLC replacements. SKM has been providing integration and maintenance services to the City since 1999.

1999 – Present:

Spanish Fork City, UT - Electrical and Controls Engineer

In 1999 SKM began working for Spanish Fork City by upgrading the electrical and controls system for their primary pump station at the Wastewater Treatment Plant. In 2004, the plant was expanded and Mark was the lead electrical and controls engineer for the project. He successfully implemented the electrical design for the project, oversaw the construction, and integrated the control system. A new fiber optic network was successfully installed and improved the operation and reliability of the SCADA system.

1998 – Present:

West Wendover, NV - Electrical and Controls Engineer

Since 1998 SKM has been providing services to the City of West Wendover for their water and wastewater systems. In 1999-2000 SKM performed a SCADA System replacement for both systems that incorporated new radios and equipment for their well field and pipeline located 20 miles from the City. In 2011-2012 SKM provided the design engineering and integration for a new MBR facility at the Water Reclamation Facility.

Other Project Experience

Present: Beaumont City, CA. WWTP MBR and RO Expansion

Present: Las Gallinas, CA. WWTP Expansion

Present: City of Imperial, CA. WWTP MBR Facility Expansion

Present: Central Davis Sewer District, Kaysville, UT. WAS Thickening Addition

2016: Ogden City, UT. Water System SCADA Upgrade

2016: Provo City, UT. WWTP UV Building Addition and Headworks Upgrade

2015: Ogden City, UT. WTP Microfiltration Upgrade

2015: Provo City, UT. WWTP Master Plan

2014: Imperial, CA. WTP Controls Upgrade

2013: City of Elko, NV. WWTP Upgrade

2013: Fort Shafter Flats, HI. WWTP MBR Facility

2011: Las Gallinas, CA. WWTP Microfiltration Addition

2011: Provo City, UT. WWTP Centrifuge Facility Upgrade

2011: Orem City, UT. WWTP Expansion

2010: Taos, NM: WWTP MBR Facility Expansion

2010: Moroni, NM: WWTP MBR Facility

2009: Brigham City, UT. WWTP Expansion

2008: Heber, CA. WWTP Expansion

2008: Inscription Canyon Ranch, AZ. WWTP MBR Plant

2008: Edgewood City, NM. WWTP MBR Facility

2007: Gallup, NM. WWTP Expansion

2006: Jerome City, ID. WWTP MBR Facility

2005: Hyrum City, UT. WWTP MBR Facility

2003: Oakley City, UT. WWTP MBR Facility



Jeff Hutchins, PLA, ASLA

Manager, Landscape Architect

Jeff Hutchins has three decades of experience as a landscape architect. Jeff’s aspirations are exemplified in his development of green infrastructure on every project that comes in the door. By emphasizing “One Water,” the comprehensive approach of managing water in an environmentally, economically and socially beneficial manner, he strives to create self-sustaining landscapes. He oversaw the construction of some of the most visible projects, including SoFi Stadium (Lake Park), Dodger Stadium, Hillcrest Park, Vista Hermosa Park, Los Angeles River Greenway Trail, Ishihara Park, and several storm water projects funded by local ballot measures, including the LA Zoo parking lot, Westside Rainwater Park, and South LA Wetlands. The City of Los Angeles Bureau of Sanitation, the AIA-LA, ASLA-SCC, and APACA recognized Jeff for his leadership in storm water design at PALAPA, an annual assembly of storm water professionals. Additionally, Jeff has worked extensively with the Los Angeles and San Jacinto School Districts to provide students of all ages with access to nature to support learning as well as social, mental, and physical health.

At a technical level, Jeff has established a project production method that has proven itself many times over. As new technologies and processes are introduced to the work flow, Jeff has integrated them while maintaining a standard of efficiency in project delivery.

REGISTRATIONS:

Registered Landscape Architect
PLA 3815 (CA)

YEARS OF EXPERIENCE:

34 Years

EDUCATION:

BS Landscape Architecture,
California State Polytechnic University, Pomona

AFFILIATIONS:

American Society of Landscape Architects
(ASLA)



Jessie Corea, PLA

Landscape Architect

Jessie Corea is a Landscape Architect with WEBB’s Landscape Architecture Department. Jessie’s experience includes developing conceptual landscape plans, graphic representations, and planting designs with both public and private clients. In addition to landscape plans, Jessie also provides general design development including entry monument design, conceptual streetscape design, presentation graphics, construction documents, and schematic detail design for WEBB’s commercial/industrial, residential development, and traffic and transportation markets.

REGISTRATIONS:

Registered Landscape Architect
PLA 6840 (CA)

EDUCATION

BS, Landscape Architecture
California Polytechnic University,
Pomona
AA, Liberal Arts
Chaffey Community College

Section G. Project Experience

The WEBB Team has been involved in the design of a number of Vector Truck Dump Stations. We have provided examples of similar projects for the City of Riverside, Jurupa Community Services District, Olivenhain Municipal Water District, and Lake Arrowhead Community Services District. Each station was designed considering the space available and the specific needs of that agency.



Vector Truck Dump Station - Willow Creek WWTP Lake Arrowhead Community Services District

Client Contact:

Scott Schroder, Engineering Manager, 909.336.7136 | sschroder@lakearrowheadcsd.com
Lake Arrowhead Community Services District - 28200 State Highway 189, Lake Arrowhead, CA, 92352

WEBB provided engineering design services for the District's Willow Creek Wastewater Treatment Plant (WCWWTP) Upgrades. The overall plan for this facility was to simplify the existing facility for equalizing flow to the Grass Valley Wastewater Treatment Plant (GVWWTP). The modifications included changing the facility to provide only primary treatment, maximizing the existing storage ponds, lining the ponds, eliminating the discharge pipeline such that all discharge is directed only to the GVWWTP, upgrading the existing headworks structures (meter, grit chamber, primary clarifier) to meet the anticipated peak flow and evaluating one of the existing primary clarifiers.

With regards to the Vector Dump Station, the District demoed the existing facility and WEBB designed the new Vector Dump Station which contains a filtered dewatering box used for dewatering sludges, clarifying liquids, and grease. The vector truck backs up to the curb stops and dumps directly into the dewatering box, which is designed to drain off the liquids into the containment area that the dewatering box rests in. The drainage from the box is then piped by gravity to an existing sewer line. This method minimizes the need for personnel to handle the solids and helps minimize odor and prevents squirrels and birds from spreading the separated solids with the sliding lid. The site also features plenty of maneuverability for multiple trucks.



Vector Truck Dump Station - Plant 1 Retention Ponds

Jurupa Community Services District

Client Contact:

Keith Backus, Project Manager - 951.685.7434 Ext. 135 | kbackus@jcsd.org
Jurupa Community Services District, 11201 Harrel Street, Jurupa Valley, CA 91752

JCSD Plant 1 is a critical regional pump station located at the southeast corner of Bain Street and Limonite Avenue. The facility plays a vital role in conveying wastewater to the City of Riverside Reclamation Plant, providing temporary storage of raw wastewater during force main operations maintenance, and offering equalization storage during peak wet weather flow. As part of the facility's continuous improvement efforts, WEBB was contracted to design a new vactor dump station.

WEBB's design of the new vactor dump station incorporates a three-bay system that can accommodate multiple vactor trucks. Each bay has a drain that is connected to an underground septic tank, which is, in turn, connected back to the plant's headworks. When the vactor trucks back over the curb into the dump bay, the load is emptied onto the flatter surface of the dump station, allowing the solids to dry, and the liquids to run down towards the drain system. Once the solids are dry, a skip loader enters the dump bay and pushes the dry solids towards the deeper part of the dump station. The loader uses the far wall as a push wall to aid in filling the skip loader, which then dumps the solids into two roll-off trash cans for disposal.

The roll-off trash cans are situated in a drainage area that collects any spillage or additional water from the solids and directs it to the septic tank. The new vactor dump station design offers a more efficient and safe solution for disposing of solids from the vactor trucks, enhancing the overall functionality of the JCSD Plant 1. WEBB's expertise in design and engineering, coupled with their understanding of the specific needs of the facility, has resulted in the successful completion of this critical project.



Beaumont Treatment Plant Expansion and Salt Mitigation

City of Beaumont

Client Contact:

Elizabeth Gibbs
City Manager
City of Beaumont
951.769.8520
egibbs@beaumontca.gov

Date Performed:

2016-2018

Team Members:

Brian Knoll, PE
Justin Logan, PE
Shane Bloomfield, PE
Mark Jeppsen, EE
Eric Ng, PE, SE
Autumn DeWoody

Design Fee:

\$4 million

Construction Cost:

\$90 million

Change Order Percentage:

2%

WWTP Expansion and Upgrade

The existing WWTP needs to be expanded and upgraded. The WWTP is currently treating over 75% of its permitted capacity and therefore must begin the expansion process. Per the new Regional Water Quality Control Board's updated Basin Plan, the City must begin reducing TDS being discharged from the plant. The City completed a feasibility study to identify the best way to expand and upgrade the plant. The WWTP upgrades include additional headworks screening, flow equalization, grit removal, fine screens, MBR, reverse osmosis, biosolids dewatering, and drying.

Brine Line - Final Design

Brine disposal is an integral part of this project and was a key driver in the selection of this project. Without a safe, reliable, and cost effective way to dispose of the brine, this project cannot move forward and compliance with the Basin Plan would be impossible. The brine pipeline connecting to the Inland Empire Brine Line (IEBL) was determined to be the best option during the feasibility study, due to cost and certainty of operation. The brine line has been sized at 12-inches and will be approximately 23-miles long. The pipeline begins at the City's WWTP and ends near the City of San Bernardino's WWTP on Waterman Avenue. WEBB is also leading the permitting of this facility with Riverside County, San Bernardino County, City of Redlands, City of Loma Linda, and City of San Bernardino.



WRCRWA WWTP Expansion - 14 MGD

Western Riverside County Regional Wastewater Authority

Client Contact:

Tom Moody, Director of Utilities
 City of Corona Department of Water and Power
 Previously WRCRWA Board President
 755 Public Safety Way
 Corona, CA 92878
 951.279.3660
 tom.moody@coronaca.gov

Date Performed:

2012-2017

Team Members:

Brian Knoll, PE
 Justin Logan, PE
 Shane Bloomfield, PE
 Eric Ng, PE, SE
 Mark Jeppsen, EE

Design Fee:

\$3.6 million

Construction Cost:

\$61 million

Change Order Percentage:

2.5%

The existing Western Riverside County Regional Wastewater Authority (WRCRWA) Treatment Plant (Plant) was originally placed in operation in March 1998 and was constructed as a design build project. The design capacity is 8.0 million gallons per day (MGD). The service area associated with this treatment facility has continued to grow over the past few years and several of the member agencies associated with the WRCRWA require additional wastewater capacity. As such, WEBB designed the 14 MGD plant expansion. The expansion project included evaluating alternatives to provide additional flow and biological capacity while reducing the overall cost of treatment. WEBB’s design includes primary, secondary, and tertiary treatment along with disinfection and solids handling. Working with the member agencies, cost effective alternatives are being selected and refined to make this project affordable to build while reducing the cost of treatment. The project also includes chemical storage and pumping.

Project Highlights

- Expanded to 14 MGD
- Operating Facility
- Headwork Screening
- Biological Treatment
- Anaerobic Digestion
- Tertiary Filtration
- Sludge Dewatering and Drying
- Storage and Pumping
- Odor Control
- EQ Basin and Pump Station
- Covered Primary Clarifiers



Recycled Water Irrigation Projects

Eastern Municipal Water District

Client Contact:

Gary Schlenker
 Senior Engineering Technician
 Eastern Municipal Water District
 2270 Trumble Road
 Perris, CA, 92572-8300
 951.928.3777
 schlenkg@emwd.org

Recycled Water Irrigation Plan

- Tr. 31632-1 Olive Ave Streetscape WO 14536
- Green Valley Streetscape POC 1 WO 19356
- Green Valley Streetscape POC 2 WO 19335
- Green Valley Median POC 4 WO 19339
- Rider 1 On-site WO 19447
- Rider 1 Off-site WO 19449
- Rider 1 Median WO 19457
- Indian and Ramona Streetscape WO 77012
- Tr. 31141 & 31142 Streetscape and Basins WO 77110
- Tr. 31142 Prairie Park WO 77112
- Tr. 30807 Settler's Park WO 19546

WEBB has been successful in planning and executing variety of work samples that range from multi-tract residential developments such as Green Valley, industrial developments such as Rider Industrial and Perris North/South, and commercial/residential developments such as Crossroads North. The projects mentioned herein all have started from Recycled Water Use Plans (RWUP) that have all been prepared by WEBB's Landscape Architecture team in collaboration with our in-house Water Resources department of civil engineers. All projects mentioned have also branched out to multiple Recycled Water Use Exhibits (RWUE) that have each presented their own unique challenges dealing with phasing, the need for temporary inter-ties with future connections, dealing with providing recycled water to individual commercial pads via a single meter and more! Facilitation of this process has been streamlined by WEBB due to our civil engineering and landscape architecture services being under one roof.

Following the RWUE WEBB is typically responsible for the development of the Recycled Water Irrigation Plan. As the final plan prior to construction, this plan is also made relatively simple since we typically know where our constraints originated. Having been through so many of these RWIPs for a much larger list than the relative projects provided we have an excellent understanding of all components that need to be included in this plan. We have worked with basically every agency in the EMWD service area that also reviews the RWIP and are well-aware of the additional requirements and standards associated with each of the agencies.



Harvest Villages III

City of Jurupa Valley

Client Contact:
Sonia Villaneda
Project Manager
Lennar Homes
980 Montecito Drive, Suite 302,
Corona, CA, 92879-1792
951.817.3650
sonia.villaneda@lennar.com

WEBB provided landscape architecture services for this project. The existing project site, consists of 29.5± acres and is situated between Pats Ranch Road on the west and Wineville Avenue on the east, north of Park Center Drive in the City of Jurupa Valley.

This specific tract is required to develop landscape improvement plans for two water quality basin/parks lots, Streetscape LMD Parkways, Perimeter Walls, Interior Fence and Walls, Interior slopes, and “Typical” Front Yards.

The preparation of a Model Home Complex Landscape Plans has been excluded from services due to the model home complex located in Harvest Villages Phase 1 continued to be used for sales.

As part of the scope of work, WEBB coordinated plans with the client, architect, and design team (including the dry utility consultant). WEBB also provided assistance with plan check comments and all questions/comments the City had regarding the plans.



Additional Treatment Project Experience

Project Name	Client	Capacity (MGD)	Treatment Technology
Imperial WWTP (Multiple)	City of Imperial, CA	5.0, 2.4, 1.0	MBR & Extended Aeration
Heber WWTP	Heber Public Utilities District, CA	2.4	Conventional Activated Sludge
Riverside WRF	City of Riverside, CA	26.0	MBR (civil only)
Temecula WRF	Eastern Municipal Water District, CA	5.0	MBR (civil only)
Willow Creek WWTP	Lake Arrowhead CSD, CA	2.5	Primary Treatment
Corona Centrifuge Replacement	City of Corona	14 MGD	Sludge Dewatering
Centrifuge Phase 2 Expansion	City of Corona, CA	14 MGD	Sludge Dewatering
WRF 1 Telecommunications Tower	City of Corona, CA		
Fort Shafter Flats WRF	Fort Shafter, HI	2.0	MBR
Jerome WWTP	City of Jerome, ID	5.0	MBR
Oakley WRF	City of Oakley, UT	0.3	MBR
Hyrum WRF	City of Hyrum, UT	2.0	MBR
Moroni WRF	City of Moroni, UT	1.0	MBR
Chino Valley WRF	Chino Valley, AZ	1.0	MBR
Paako WWTP	Paako, NM	0.1	MBR
Edgewood WRF	City of Edgewood, NM	0.2	MBR
San Felipe WRF	City of San Felipe, NM	0.6	MBR
The Cliffs WRF	Boise, ID	0.6	MBR
Richmond WRF	City of Richmond, UT	0.6	MBR
Inscription Canyon	Chino Valley, AZ	0.3	MBR
Wolf Creek WRF	Wolf Creek, UT	0.5	MBR
Las Gallinas WRF	Las Gallinas Valley Sanitary District, CA	3.5 MGD	Conventional Activated Sludge with tertiary filtration
Vactor Truck Dump Station	Eastern Municipal Water District, CA		
Chiquita WRF Master Plan Review	Rancho Mission Viejo, CA		
San Jacinto Valley WRF Erosion Mitigation Design	Eastern Municipal Water District, CA		
City of Banning WWTP EQ Tank	City of Banning, CA		
WWTP Headworks and Dewatering Equipment	Morongongo Band of Mission Indians, CA		Dewatering

Section H. References

The City will benefit from WEBB's team approach to client service. Our reputation for superior quality work, integrity, and long-standing client relationships is a direct result of our industry proven capabilities and experience. We encourage the City to speak with your staff who have worked with our firm and call our references to truly understand the commitment we make to each of our clients and their projects.

Contact	Agency	Address, Phone and Email
Elizabeth Gibbs, City Manager	City of Beaumont 550 East 6th Street Beaumont, CA 92223-2253	951.769.8520 egibbs@beaumontca.gov
Thomas Moody, Director of Utilities <i>Previously WRCRWA Board President</i>	City of Corona Department of Water and Power 755 Public Safety Way Corona, CA 92878	951.279.3660 tom.moody@coronaca.gov
Jackie Loper, Director of Community Development	City of Imperial 420 S. Imperial Avenue Imperial, CA 92251	760.355.3336 jloper@cityofimperial.org

Section I. Scope of Services

Task 1 – Project Administration

Prepare and implement an effective Project Management Plan to keep the project on schedule. Attend adequate number of meetings to manage the project and provide the required deliverables. At a minimum, budget for the following:

- A. Project Schedule, Status Reports, Invoices, Administration
 - 1. Prepare a project design and estimated bidding/construction schedule in MS Project. Update schedule monthly.
 - 2. Prepare and submit monthly status reports providing an overview of progress made during the month and tasks to be accomplished during the following month with invoice.
 - 3. Submit invoices which follow the task items provided in the hours/fee table provided with the proposal and/or used as a basis for the contract. Provide a brief narrative by task of the work performed during the billing cycle and copies of invoices for direct expenses.

- B. Engineering Phase Meetings
 - 1. Kick-off Meeting
 - 2. Project/progress meetings, as needed
 - 3. Preliminary Design Memorandum Review Workshop
 - 4. 50% Submittal Review
 - 5. 90% Submittal Review
 - 6. 100% Submittal Review

Additional meetings may be required at City’s discretion if more than two months elapses between submittal reviews listed above.

At City’s discretion, meetings may be held remotely to accommodate COVID-19 safety recommendations.

Task 1 Deliverables

- 1. Meeting Agendas & Minutes (electronic)
- 2. Monthly Status Reports (electronic)
- 3. Monthly Updated Project Schedules (electronic)
- 4. Monthly Invoices (electronic)

Task 2 – Project 1: Dust/Erosion Mitigation and Truck Access Improvements

The purpose of Project 1 is to improve site conditions as described below.

- A. Prepare Preliminary Design Concepts – After conferring with the City and visiting the site, our team will develop a conceptual design to accomplish the following objectives.
 - 1. Reduce dust being generated from exposed dirt areas around the Plant.
 - 2. Minimize erosion and runoff from the site including graded slopes.
 - 3. Eliminate runoff from entering the UV channel.
 - 4. Improved truck access to the sludge loading structure.
 - 5. Create 15-20 parking spaces adjacent to the Membrane Treatment Building.

- B. Review Workshop with City Staff – Conduct a review workshop with City engineering and Operations Staff to review the conceptual designs prepared in Task 2-A. Obtain City input and comments.

- C. 50% Design – Prepare civil, structural, and mechanical plans to 50% level for review by the City. Plans to be prepared in AutoCAD.

- D. 90% Design – Prepare civil, structural, and mechanical plans to 90% level for review by the City. Plans to be prepared in AutoCAD.
- E. 100% Design – Prepare civil, structural, and mechanical plans to 100% level for review by the City. Plans to be prepared in AutoCAD.
- F. Specifications and Bidding Documents – Prepare construction specifications and bidding documents for the Project.

Task 2 Deliverables

- 1. Meeting agendas and minutes for workshop (electronic).
- 2. Final design plans (hardcopy and electronic).
- 3. Final specifications and bid documents (hardcopy and electronic).
- 4. Final cost estimate.

Task 3 – Project 2: Main Entrance Gate, Landscaping, Lighting, and Monument Sign

The purpose of Project 2 is to improve the Entry Gate Access Area as follows.

- A. Prepare Preliminary Design Concepts – After conferring with the City and visiting the site, our team will develop a conceptual design to accomplish the following objectives:
 - 1. Move the primary Entrance Gate into the Plant to allow trucks and passenger vehicles to pull off Fourth Street into the Plant without blocking traffic and endangering staff. The fence will be realigned with new motorized and secured gates.
 - 2. Improve overall aesthetics by upgrading the landscaping and lighting at the Plant Entry.
 - 3. Placement of an Entry Monument.
- B. Review Workshop with City Staff – Conduct a review workshop with City Engineering and Operations Staff to review the conceptual designs prepared in Task 3-A. Obtain City input and comments.
- C. 50% Design – Prepare civil, structural, electrical, and mechanical plans to 50% level for review by the City. Plans to be prepared in AutoCAD.
- D. 90% Design – Prepare civil, structural, electrical, and mechanical plans to 90% level for review by the City. Plans to be prepared in AutoCAD.
- E. 100% Design – Prepare civil, structural, electrical, and mechanical plans to 100% level for review by the City. Plans to be prepared in AutoCAD.
- F. Specifications and Bidding Documents – Prepare construction specifications and bidding documents for the Project.

Task 3 Deliverables

- 1. Meeting agendas and minutes for workshop (electronic.)
- 2. Final design plans (hardcopy and electronic).
- 3. Final specifications and bid documents (hardcopy and electronic).
- 4. Final cost estimate.

Task 4 – Project 3: Vector Dump Station

The purpose of Project 3 is to install a new dump station for City vector trucks.

- A. Prepare Preliminary Design Concepts – After conferring with the City and visiting the site, our team will develop a conceptual design to accomplish the following objectives:
 - 1. Site a new dump station for City vector trucks.
 - 2. Provide access to the new dump station for vector trucks and waste management pickups.
 - 3. Design based upon the example from Lake Arrowhead CSD’s Willow Creek WWTP.
- B. Review Workshop with City Staff – Conduct a review workshop with City engineering and Operations Staff to review the conceptual designs prepared in Task 4-A. Obtain City input and comments.

- C. 50% Design – Prepare civil, structural, plumbing, electrical, and mechanical plans to 50% level for review by the City. Plans to be prepared in AutoCAD.
- D. 90% Design – Prepare civil, structural, plumbing, electrical and mechanical plans to 90% level for review by the City. Plans to be prepared in AutoCAD.
- E. 100% Design – Prepare civil, structural, plumbing, electrical and mechanical plans to 100% level for review by the City. Plans to be prepared in AutoCAD.
- F. Specifications and Bidding Documents – Prepare construction specifications and bidding documents for the Project.

Task 4 Deliverables

- 1. Meeting agendas and minutes for workshop (electronic).
- 2. Final design plans (hardcopy and electronic).
- 3. Final specifications and bid documents (hardcopy and electronic).
- 4. Final cost estimate.

Task 5 – Bidding Services

Our team will perform the following service during bidding. For budgeting purposes, we assume all three projects will be bid together in one construction project.

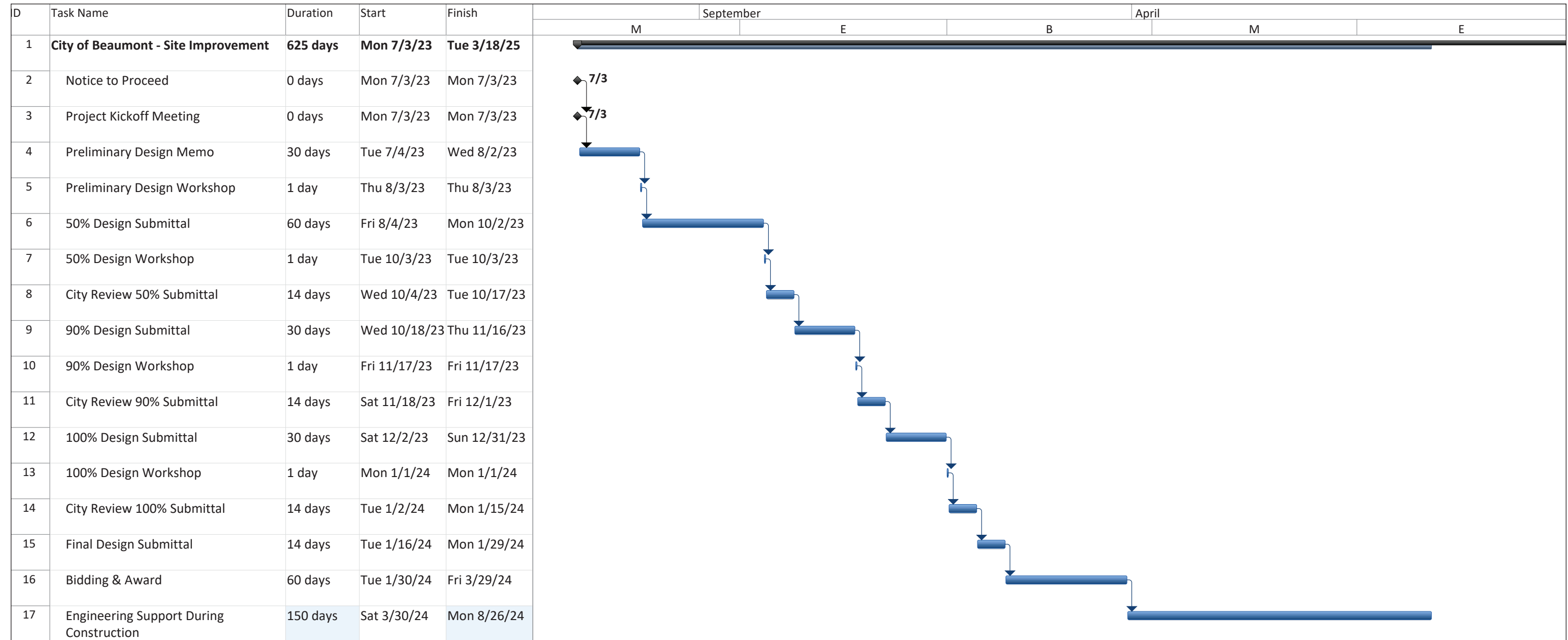
- A. Pre-bid Site Tour – Our team will attend one pre-bid site tour for contractors to review the project and observe on-site conditions.
- B. Prepare Bid Addenda – Our team will prepare up to three bid addenda to respond to questions from contractors prior to bidding.
- C. Prepare Conformed Plans and Specification – Following bidding, our team will prepare conformed plans and specifications to incorporate any changes made during bidding.

Task 6 – Engineering Services During Construction

Our team will perform the following service during construction.

- A. Pre-bid Construction Meeting – Our team will attend one preconstruction site meeting with the contractor and City Operations Staff to review the project requirements prior to beginning construction.
- B. Submittal Review – Our team will prepare contractor material submittals. For budgeting purposes, we assume there will be 30 original submittals and 10 resubmittals.
- C. RFI Review and Response – Our team will review and respond to contractor RFI’s during construction. For budgeting purposes, we assume there will be 20 RFI’s.
- D. Site Visits During Construction – Our team will visit the site periodically during construction to review progress and verify the work is in compliance with the plans and specifications. For budgeting purposes, we assume a construction duration of four months (80 working days) with 30 days of field observation.
- E. Construction Management – Our team will provide construction management, including the following:
 - 1. Coordination with the Contractor.
 - 2. Review schedules.
 - 3. Review Contractor pay applications.
 - 4. Assist the City with contract closeout.

Project Schedule



Section J. Cost Proposal


In accordance with the RFP, WEBB has submitted the Cost Proposal in a separate sealed envelope.

Section K. Additional Information

No additional information at this time.

Section L. Insurances

Below is a sample COI of WEBB's coverage. WEBB will provide the City with an updated COI meeting all coverage requirements as specified in the professional services agreement.

		ALBEAWE-01	SGONZALEZ
CERTIFICATE OF LIABILITY INSURANCE			DATE (MM/DD/YYYY) 1/27/2023
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.			
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).			
PRODUCER License # 0757776 HUB International Insurance Services Inc. PO Box 5345 Riverside, CA 92517		CONTACT NAME: Kristie Koehrer PHONE (A/C, No, Ext): (951) 779-8558 FAX (A/C, No): (951) 231-2572 E-MAIL ADDRESS: cal.cpu@hubinternational.com	
INSURED		INSURER(S) AFFORDING COVERAGE	
Albert A. Webb Associates 3788 McCray Street Riverside, CA 92506		INSURER A : Travelers Property Casualty Company of America NAIC # 25674 INSURER B : Lexington Insurance Company 19437 INSURER C : INSURER D : INSURER E : INSURER F :	
COVERAGES		CERTIFICATE NUMBER:	
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.		REVISION NUMBER:	
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD. WVD	POLICY NUMBER
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> \$0 Deductible GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PER ACC <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:		P-630-5456P929-TIL-23
			POLICY EFF (MM/DD/YYYY)
			2/1/2023
			POLICY EXP (MM/DD/YYYY)
			9/1/2023
			LIMITS
			EACH OCCURRENCE \$ 1,000,000
			DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000
			MED EXP (Any one person) \$ 5,000
			PERSONAL & ADV INJURY \$ 1,000,000
			GENERAL AGGREGATE \$ 2,000,000
			PRODUCTS - COM/PIO/AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		BA-3L23491A-23-43-G
			POLICY EFF (MM/DD/YYYY)
			2/1/2023
			POLICY EXP (MM/DD/YYYY)
			9/1/2023
			LIMITS
			COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
			BODILY INJURY (Per person) \$
			BODILY INJURY (Per accident) \$
			PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0		CUP-9H486836-23-43
			POLICY EFF (MM/DD/YYYY)
			2/1/2023
			POLICY EXP (MM/DD/YYYY)
			9/1/2023
			LIMITS
			EACH OCCURRENCE \$ 2,000,000
			AGGREGATE \$ 2,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N Y N/A	UB-4J648178-22-43-G
			POLICY EFF (MM/DD/YYYY)
			9/1/2022
			POLICY EXP (MM/DD/YYYY)
			9/1/2023
			LIMITS
			<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER
			E.L. EACH ACCIDENT \$ 1,000,000
			E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
			E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liab.		031711122
			POLICY EFF (MM/DD/YYYY)
			9/1/2022
			POLICY EXP (MM/DD/YYYY)
			9/1/2023
			LIMITS
			Ded \$150k/EaClaim 2M 2,000,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) For Informational Purposes Only.			
CERTIFICATE HOLDER		CANCELLATION	
For Insured's Purposes Only		SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.	
		AUTHORIZED REPRESENTATIVE	
		